## ABSTRACT OF THE DISCLOSURE

[000120] An enhanced dynamic range wavefront sensing system includes a light source disposed on a first side of an optically transmissive device, a wavefront sensor disposed on a second side of an optically transmissive device, a relay imaging system disposed between the optically transmissive device and the wavefront sensor, and means for adjusting a distance between the light source and the optically transmissive device. Beneficially, the relay imaging system includes a range-limiting aperture to insure that the wavefront sensor never goes out of range so that a feedback system can be employed to move the light source one focal length away from the optically transmissive device.